

Public
Works
Responsibilities

Utility Construction Permitting

Entrance Construction Permitting

Subdivision Construction

Plan & Constructability Review

Community Transportation Fund

Public Works

CHAPTER 6

CONSTRUCTION ADMINISTRATION

Figure 6.1-a DelDOT Public Works Engineers

<p>New Castle County (DelDOT Canal District) Public Works Engineer 250 Bear-Christiana Road Bear, DE 19701 (302) 326-4679</p>
<p>Kent County (DelDOT Central District) Public Works Engineer 930 Public Safety Blvd. Dover, DE 19901 (302) 760-2433</p>
<p>Sussex County (DelDOT South District) Public Works Engineer 23697 DuPont Blvd. Georgetown, DE 19947 (302) 853-1340</p>

6.1 PURPOSE

This chapter addresses the permit application process, Notice to Proceed (NTP), and inspection and acceptance procedures for construction of commercial sites, subdivision streets, including industrial streets, and off-site improvements.

Implementation of these procedures will ensure that construction within the State right-of-way is in compliance with this *Development Coordination Manual*, Standard Specifications, Standard Construction Details, *Construction Manual* and other applicable DelDOT standards.

Utility Permitting



Utility Permit

PERMIT ID: KC-0312-20F
PROJECT NAME: 8299 2002 3074 8757

EMERGENCY

AREA:
ADC GRID: 29B6
KAPPA GRID:

COMPANY: Comcast Cable
Authorized By: John Pallam
Permit Type: Utility Permit

Location: 1588 Chimney Hill Rd, Felton, Delaware, 19943

Project Description: FROM POLE/PED 30252/86846 ON WEST SIDE OF RD BORING RD THEN CONTINUE SOUTH FOR APPROX 145 FT THE EAST TO HOUSE HDPE 1 1/4" CONDUIT WILL BE 42" UNDER ROADWAY AND 24" UNDER PAVED SHOULDER IF NEEDED CONDUIT WILL EXTEND 5' BEYOND PAVEMENT NO ROAD OPENINGS WILL BE PERMITTED UNDER THIS PERMIT W/O PRIOR PERMISSION FROM DELDOT WORK 10' EOP

Dimension: 200 FT

Utility Coordinator: **TRAFFIC CONTROL MUST BE IN ACCORDANCE WITH THE DE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD-Latest Edition)**

CONTACT INSPECTOR 24 HRS IN ADVANCE PRIOR TO ANY WORK.

6" TOPSOIL, SEED AND MULCH SHALL BE PLACED TO ALL DISTURBED AREAS.

ALL ROAD BORES SHALL BE PLACED PERPENDICULAR TO THE CENTERLINE OF ROADWAY. 42" MIN DEPTH REQUIRED

INSPECTOR: Stephen Gary
INSPECTOR PHONE: 3026322600
INSPECTOR EMAIL: Stephen.Gary@delaware.gov
FIELD CONTACT: Will Gooch
FIELD CONTACT PHONE: 2405861605
FIELD CONTACT EMAIL: William.Gooch@delcivutrac.net

Received: 6/18/2020
Issued On: 6/25/2020
Expiry Date: 12/25/2020
Permit Site: Kent

DelDOT Authorized Signature:

Signature on File

It is hereby agreed by both parties involved in the granting of this permit that the actual construction or adjustment covered by this permit shall be performed in accordance with the policies and procedures set forth in the Utilities Policies and Procedures Manual, State of Delaware, Division of Maintenance and Operations, in effect on the date of this permit. Work is to be begun within 30 days from the date of this permit and completed with as little delay as possible, the right to work under this permit expires 6 months from the date of issuance. It may be renewed or extended upon application.

The holder of this permit shall indemnify and save harmless the Division of Maintenance and Operations of and from all suits and damages arising from or on account of the construction or operation of its said poles, wire, pipe, conduits, appurtenances, etc. herein permitted on State rights-of-way.

Permittee shall call the Division of Maintenance and Operations Permit Section, (North District - 326-6079, Central District - 760-2444, South District - 853-1340) 24 hours prior to any installation on State rights-of-way.

Traffic Control shall be in accordance with the Delaware Manual on Uniform Traffic Control Devices.



Entrance Permitting



PERMIT FOR ENTRANCE CONSTRUCTION PERMIT NO. : KC-0012-22CM

DISTRICT Kent AREA 8 PERMIT NO. KC-0012-22CM DATE 09/19/2022
Type Of Access Commercial Bonding Company _____
Maintenance Road No. Victory Chapel Rd Delaware Grid Coordinate _____
Issue To Mary Ann Byler Phone No. : 3025359475
Address : 749 Victory Chapel Road , Dover, DE 19904
Type Of Security Furnished _____ Amount : _____ (50% of cost)
Estimated Construction Cost : _____ Expiration Date : 09/19/2023
PARCEL ID NO 9-00-08500-01-4000-00001
900 Public Safety Blvd
Dover, DE 19901

DESCRIPTION OF CONSTRUCTION

Tax Parcel ID #: 9 00 06500 01 4000 App#: 487541856

Entrance located on the west side of Victory Chapel Rd approximately 1,750 feet south of Denney's Rd.

Description of Work: All work shall be performed in accordance with the DelDOT Standard Specifications and in accordance with drawings prepared by Minnick Engineering, and approved by the DelDOT Subdivision Engineer on August 11, 2022. All work shall be performed in accordance with the most current Delaware Department of Transportation (DelDOT) Standard Specifications and DelDOT Standard Construction Details. In the event there is a conflict between DelDOT Standards and Specifications and the approved plans, DelDOT Standards and Specifications will supersede the approved plans.

Permit applicant shall furnish 40 linear feet of 15-inch diameter reinforced concrete pipe (Class 4) and rubber gasket material for sealing pipe joints. Drainage pipe and joint connecting material must comply with DelDOT Standard Specification - Section 612. If the 15-inch diameter reinforced concrete pipe (Class 4) does not fit you are permitted to install 12-inch diameter reinforced concrete pipe (Class 4).

DelDOT specifications and manuals are available at www.delnet.gov -<delnet> -<delnet> -<delnet> This permit is issued with the following stipulations:

- o Conforms to DelDOT, Tailgate Precon - Held on Site 48 hours prior to construction.
- o Certificate of Occupancy will not be granted from Kent County until the permit applicant receives a letter from DelDOT stating all work is completed.

Contact the DelDOT Permits Inspector 72 hours prior to commencing construction at (302) 632-6512. The applicant and contractor shall meet with the DelDOT inspector on site prior to commencement of work. All streets and roads shall be kept clear and clean of all dirt, mud and debris at all times.

This permit will be rescinded if the permittee does not comply with the requirements specified by this permit.



Subdivision Permitting

- Approved Plans
- Construction Estimate
- Bond/Letter of Credit
- Source of Materials & Soils
- NCHRP-350 MASH Traffic Controls
- Detour/MOT Plan
- Construction Schedule
- Initial Inspection
- ADA Inspection
- Final Inspection
- Acceptance & Bond Release



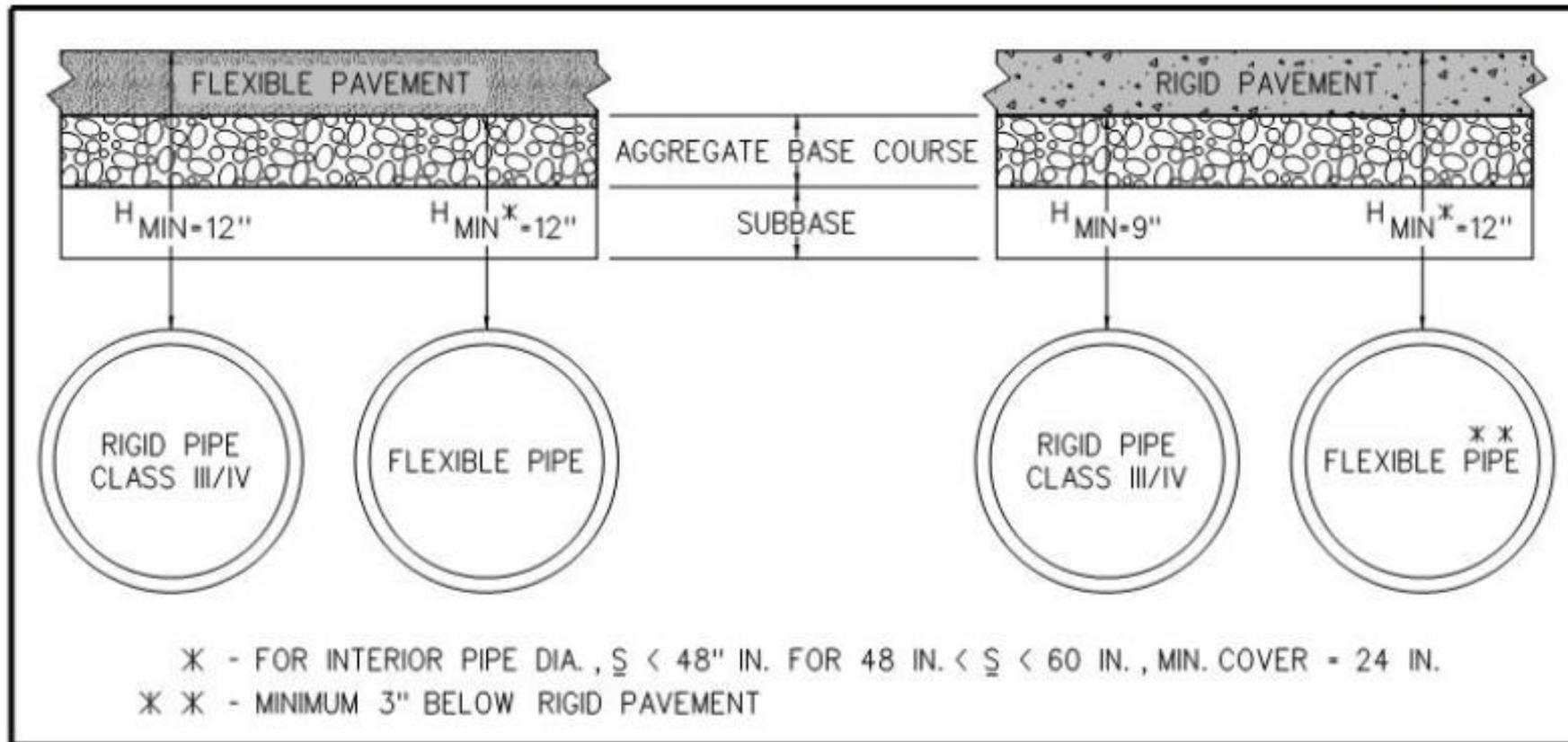
Construction Issues-Shallow Plastic Pipelines



DCM Chapter 5 Pipe Cover Requirements

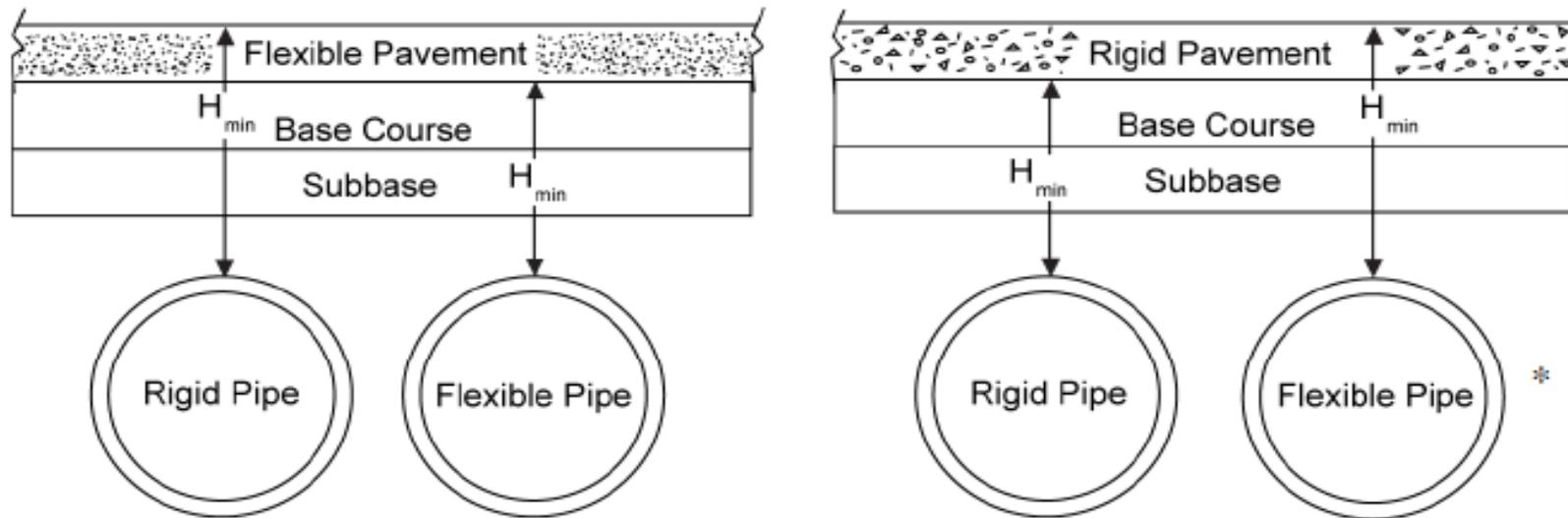
DelDOT Development Coordination Manual

Figure 5.7.2.5-a Material Based Pipe Cover Requirements (Standard Installation)



DGM 1-20 Figure 2 Minimum Cover

Figure 2
Minimum Cover Orientation



H_{min} = minimum allowable cover dimension

Note: The minimum cover dimension is not to be confused with the fill height used for calculation purposes, which shall be from the top of the pipe to the top of the surface, regardless of the pipe type or pavement type.

*Minimum 3" below rigid pavement

Pre-Paving Subdivision HDPE Pipe Video



Pre-Paving Subdivision HDPE Pipe Video



Pre-Paving Inspection HDPE Pipe Video



Ruptured Pipe HDPE Pipe Video



HDPE Pipe Manufacturer's Placement Requirements

Soil Suitability 

Class II materials provide a relatively high level of pipe support when moderately compacted with either vibration or impact compaction methods.

Class I materials have more stiffness than Class II materials, but data indicates that the stiffness of uncompacted Class I materials can be taken equivalent to Class II materials compacted to 95%, and the stiffness of compacted Class I materials can be taken equivalent to Class II materials compacted to 100%.

The open-graded groups within this classification may allow migration, and the particle size distributions should be reviewed for compatibility with adjacent material.

Uniform fine sands (SP) with more than 50% passing the #100 sieve behave like silts and are not considered Class II materials.

Backfill Must Meet Class II

ASTM D2321 Soil Class II
Clean, Coarse-Grained Soils

Sands and gravels with 12% or less fines.

ASTM D2487 Soil Group

GW Well-graded gravels and gravel-sand mixtures

GP Poorly-graded gravels and gravel-sand mixtures

SW Well-graded sands and gravelly sands

SP Poorly-graded sands and gravelly sands

AASHTO M145 Soil Groups A1 and A3

Unified Soil Classification System

HDPE Pipe Manufacturer's Bedding Requirements

12"
MIN
Cover.



MINIMUM COVER HEIGHTS FOR LIVE LOADS

Truck Loadings (H20, H25 or HL93) ¹	12 inches
Minimum Cover for E-80 (Rail Road) Loads.....	24 inches
Temporary Cover for Construction Loads ²	2 to 4 feet

¹May be subject to local or state agency minimum cover requirements.

²Cover for construction loads depends on pipe diameter and construction equipment (see table to right).

MINIMUM COVER FOR CONSTRUCTION LOADS (in)

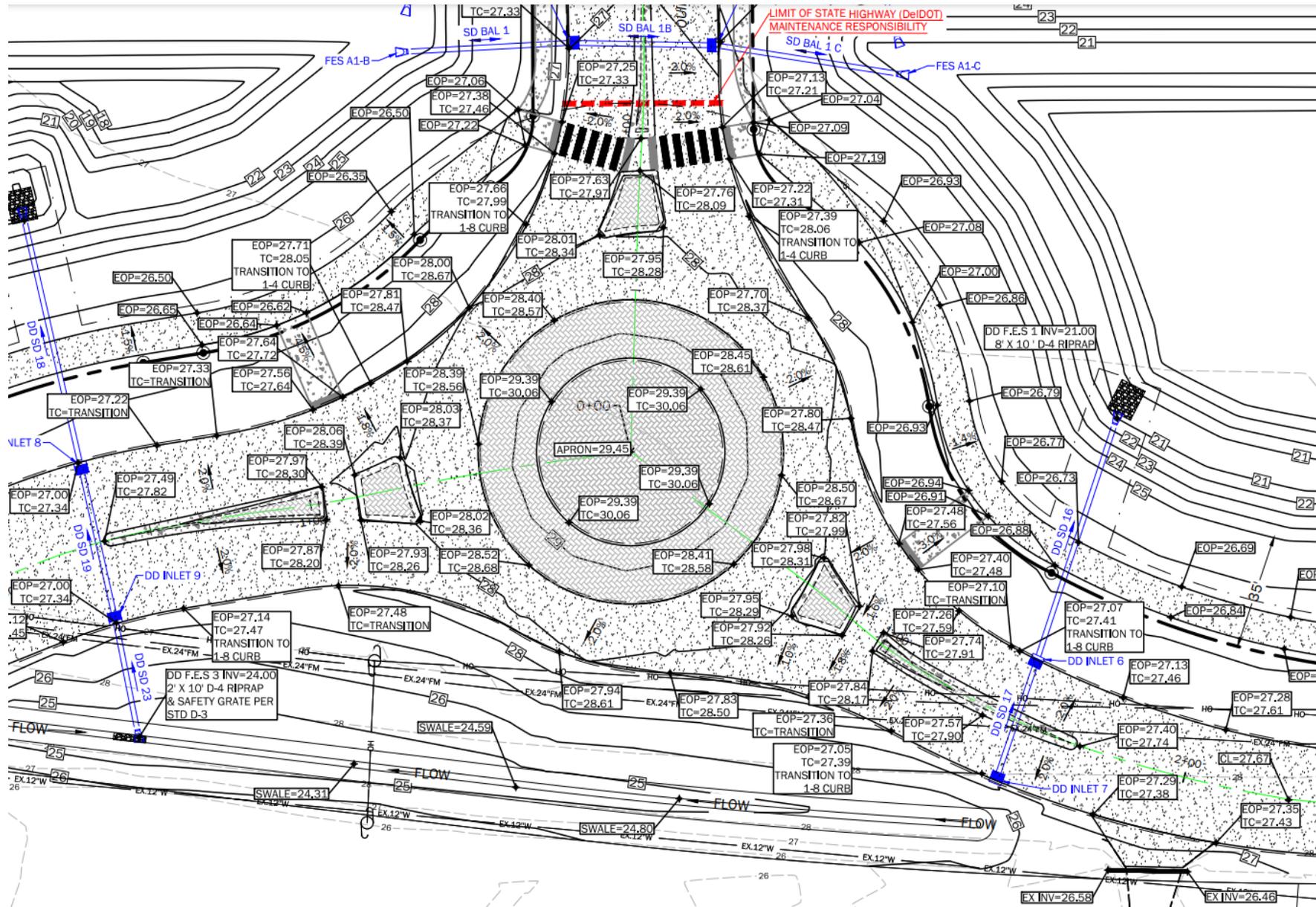
Nominal Pipe Diameter (ft)	Axle Loads (kips)			
	18-50	50-75	75-110	110-150
2.0 - 3.0	24.0	30.0	36.0	36.0
3.5 - 5.0	36.0	36.0	42.0	48.0

Minimum cover shall be measured from the top of the pipe to the top of the maintained construction roadway surface.

24" MIN. Cover during Construction

Plan Review QA/QC

- Cross section slopes don't match grade slopes.
- Ensure positive drainage conveyance beyond site limits.
- Make field visits. Verify site conditions.
- Triple check survey. Ensure survey is using the same datum between two parties.

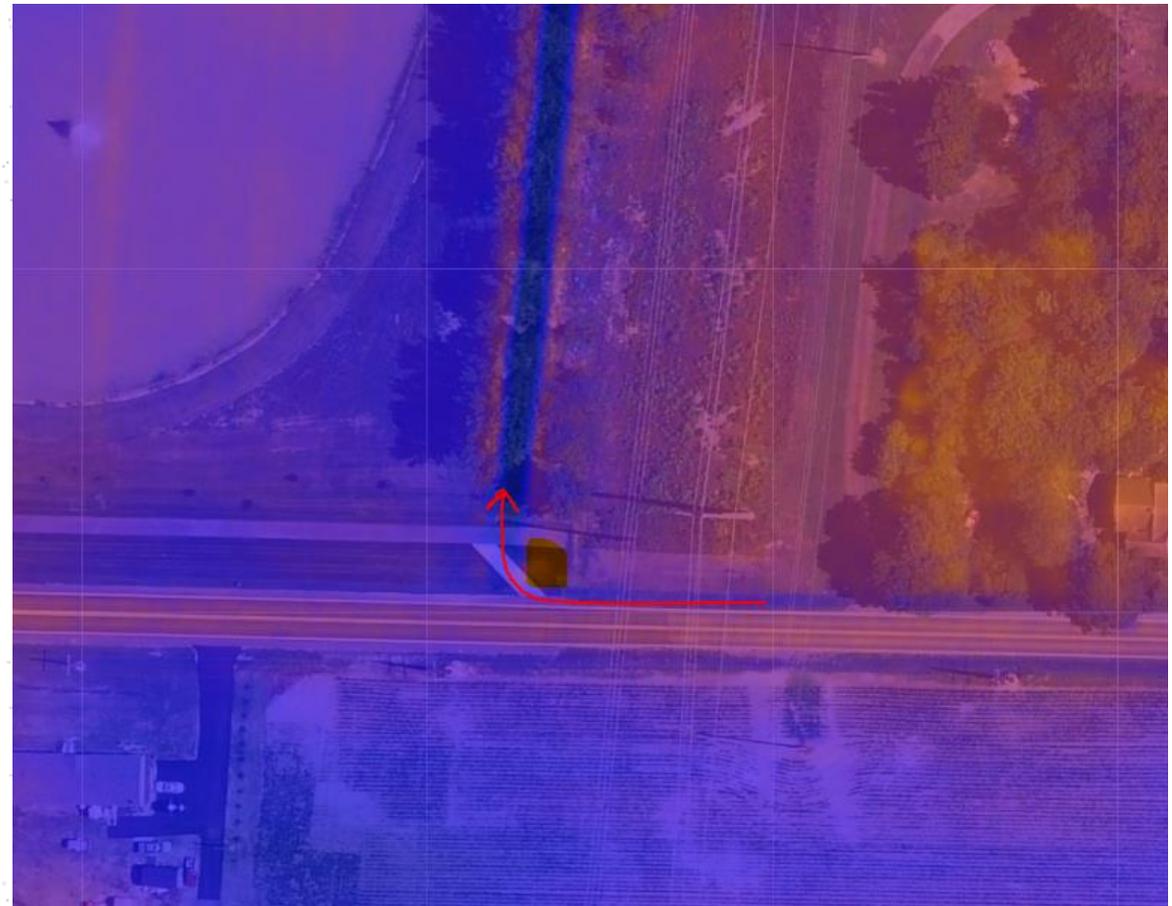
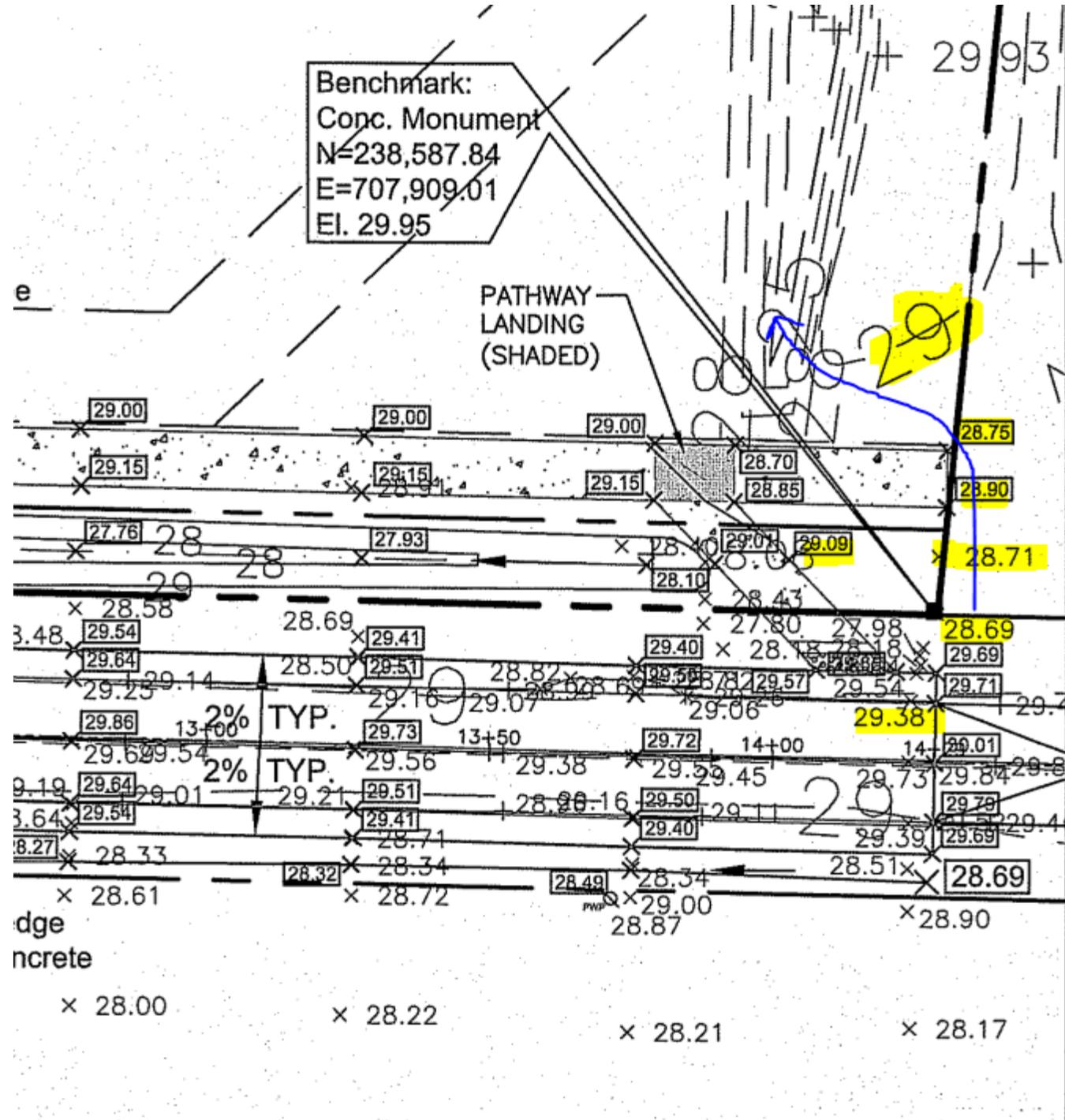


Roadside Slopes and Cross Slopes



Benchmark:
Conc. Monument
N=238,587.84
E=707,909.01
El. 29.95

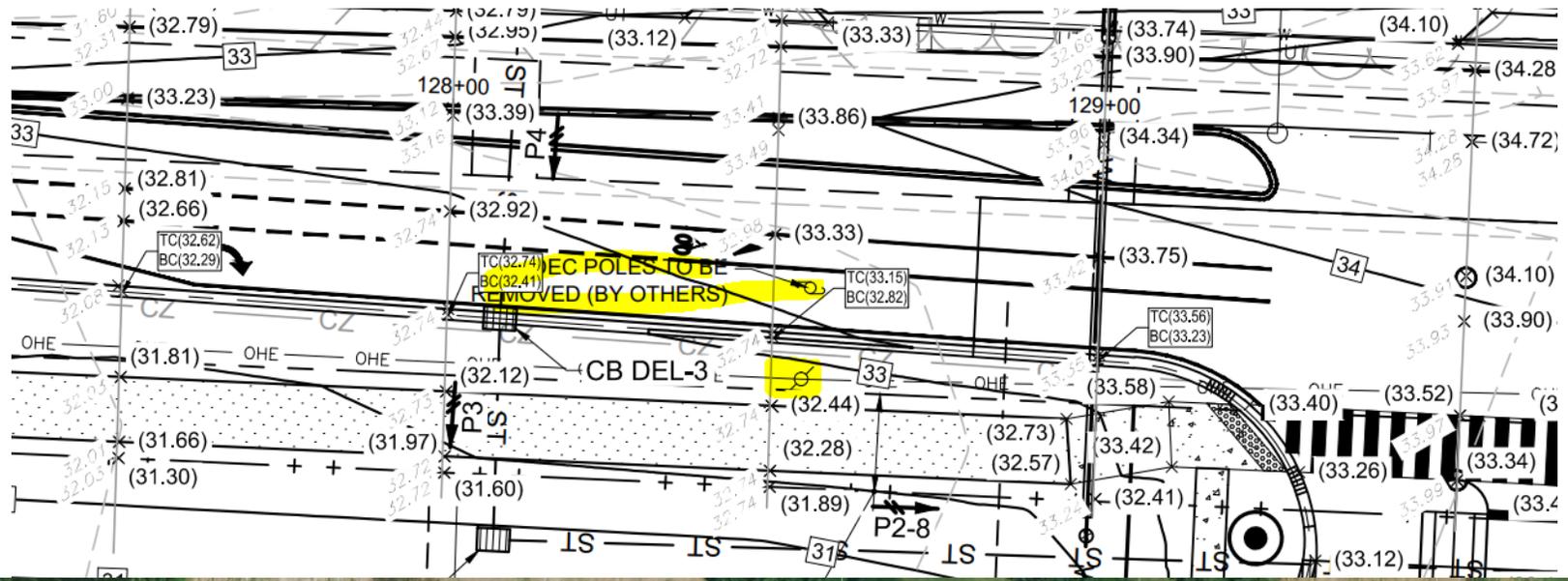
PATHWAY
LANDING
(SHADED)



Utility Coordination

- Coordinate utility relocations early.
- Relocations aren't outside clear zone or lateral clearances.
- Utility companies need to incorporate subdivision plans into utility plans to account for subdivision improvements.
- Utility relocations need to be included in construction schedule with confirmation from utility company that they can meet said construction schedule prior to pre-con/NTP.







PHASING NOTES:

1. HAMMERHEAD PHASE IMPROVEMENTS SHALL INCLUDE BUT MAY NOT BE LIMITED TO THE CONSTRUCTION OF A HAMMERHEAD ENTRANCE (CHASE OAKS DRIVE), DRAINAGE IMPROVEMENTS, ASSOCIATED SIGNAGE, AND STRIPING ALONG WEBB'S LANDING ROAD (SCR 277B). PHASE 1 IMPROVEMENTS SHALL BE CONSTRUCTED AND ACCEPTED PRIOR TO THE ISSUANCE OF THE 1ST BUILDING PERMIT.
2. PHASE 1A:1C IMPROVEMENTS SHALL INCLUDE BUT MAY NOT BE LIMITED TO THE CONSTRUCTION OF THE REMAINING ENTRANCE AND ROADWAY IMPROVEMENTS ALONG WEBB'S LANDING ROAD, PURSUANT TO THE DELDOT APPROVED ENTRANCE PLANS. HAMMERHEAD PHASE & 1A:1C IMPROVEMENTS SHALL BE CONSTRUCTED AND ACCEPTED PRIOR TO THE ISSUANCE OF THE 17TH BUILDING PERMIT.

New Sussex County permit tracking website

<https://sussex-deldot-permit-program-deldot.hub.arcgis.com/>

Delaware.gov Agencies News Topics Contact

DeIDOT - Sussex County Building Permit Tracker

Seal of Sussex County, Delaware

This dashboard tracks the release of building permits in real-time for developments in Sussex County with DeIDOT off-site improvement agreements.

Permits Issued

- 202213632**
Issued: 9/26/2022
Desc. 1: 2ST BRAMANTE ON CRAWL 40X58 GAR 20X22 PORCH 8X9 PORCH 8X12
Desc. 2: FAST TRACK OUT OF TOWN
Permit Status: A
Application Status: O
- 202213634**
Issued: 9/26/2022
Desc. 1: 1ST SAVANNAH ON CRAWL 50X61 GAR 20X22 PORCH 16X5 PORCH 19X13
Desc. 2: FAST TRACK OUT OF TOWN
Permit Status: A
Application Status: O
- 202213635**
Issued: 9/26/2022
Desc. 1: 1ST CUMBERLAND FIN - UNFIN BASEMENT 50X61 GAR 20X22 PORCH 30X
Desc. 2: 6 PORCH 18X9
FAST TRACK OUT OF TOWN
Permit Status: A

Map showing Sussex County, Delaware, with various permit locations marked. Includes navigation tools and a scale of 10 ft.

Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS Powered by Esri

Permits Issued Pending Applications Certificate of Occupancy

Questions